2015 Supervisory Scenarios for Annual Stress Tests Required under the Dodd-Frank Act Stress Testing Rules and the Capital Plan Rule

October 23, 2014

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

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Introduction

The Dodd-Frank Wall Street Reform and Consumer Protection Act requires the Board of Governors of the Federal Reserve System (Board) to conduct an annual supervisory stress test of bank holding companies (BHCs) with $50 billion or greater in total consolidated assets (large BHCs), and to require BHCs and state member banks with total consolidated assets of more than $10 billion to conduct company-run stress tests at least once a year.[1] This publication describes the three supervisory scenarios—baseline, adverse, and severely adverse—that the Board will use in its supervisory stress test; that a BHC or state member bank must use in conducting its annual company-run stress test for this stress test cycle; and that a large BHC must use to estimate projected revenues, losses, reserves, and pro forma capital levels as part of its capital plan submission.[2] The publication also details additional components that certain BHCs will be required to incorporate into the supervisory scenarios—the global market shock component and the counterparty default component.

[1] 12 U.S.C. 5365(i).

[2] See 12 CFR 252.14(b), 12 CFR 252.54(b), and 12 CFR 225.8.

Supervisory Scenarios

The adverse and severely adverse scenarios describe hypothetical sets of conditions designed to assess the strength of banking organizations and their resilience to adverse economic environments. The scenarios are not forecasts. The baseline scenario follows a similar profile to the average projections from surveys of economic forecasters. It does not represent the forecast of the Federal Reserve.[3]

The scenarios start in the fourth quarter of 2014 (2014:Q4) and extend through the fourth quarter of 2017 (2017:Q4). Each scenario includes 28 variables; this set of variables is the same as the set provided in last year's supervisory scenarios. The variables describing economic developments within the United States include:

- **Six measures of economic activity and prices:** percentage changes (at an annual rate) in real and nominal Gross Domestic Product (GDP); the unemployment rate of the civilian non-institutional population aged 16 years and over; percentage changes (at an annual rate) in real and nominal disposable personal income; and the percentage change (at an annual rate) in the Consumer Price Index (CPI);
- **Four aggregate measures of asset prices or financial conditions:** indices of house prices, commercial property prices, equity prices, and U.S. stock market volatility; and,
- **Six measures of interest rates:** the rate on the 3-month Treasury bill; the yield on the 5-year Treasury bond; the yield on the 10-year Treasury bond; the yield on a 10-year BBB corporate security; the interest rate associated with a conforming, conventional, fixed-rate 30-year mortgage; and the prime rate.

The variables describing international economic conditions in each scenario include three variables in four countries or country blocks:

- **The three variables for each country or country block:** the percentage change (at an annual rate) in real GDP, the percentage change (at an annual rate) in the CPI or local equivalent, and the level of the U.S. dollar/foreign currency exchange rate.
- **The four countries or country blocks included:** the euro area (the 18 European Union member states that have adopted the euro as their common currency), the United Kingdom, developing Asia (the nominal GDP-weighted aggregate of China, India, South Korea, Hong Kong Special Administrative Region, and Taiwan), and Japan.

Baseline, Adverse and Severely Adverse Scenarios

The following sections describe the baseline scenario, the adverse scenario, and the severely adverse scenario.

The variables included in these scenarios are provided in tables at the end of this document. They can also be downloaded as an Excel spreadsheet (together with the historical time series of the variables) from the Board's website, at www.federalreserve.gov/bankinforeg/stress-tests-capital-planning.htm.

Baseline Scenario

The baseline scenario is very similar to the average projections from surveys of economic forecasters. For example, the outlook for U.S. real activity and inflation in the baseline is in line with the October 2014 consensus projections from *Blue Chip Economic Indicators*.[4]

The baseline scenario for the United States (see Table 1A) is for a sustained, moderate expansion in economic activity. Real GDP grows at an average rate of just under 3 percent per year over the scenario; the

[3] For more on the Federal Reserve's framework for designing scenarios for stress testing, see 12 CFR 252, appendix A.

[4] See Aspen Publishers (2014), "Blue Chip Economic Indicators," vol. 39, no. 10 (October 10).

unemployment rate declines modestly, reaching 5¼ percent by the end of the scenario in the fourth quarter of 2017; and CPI inflation averages just over 2 percent per year.

Accompanying this moderate economic expansion is a gradual normalization in Treasury yields across the maturity spectrum. Short-term Treasury rates begin to increase in the second quarter of 2015 and rise steadily thereafter, reaching just over 3 percent by the end of 2017. Five- and 10-year yields increase from the start of the scenario period and reach 4 percent and 4¼ percent, respectively, by the fourth quarter of 2017. Spreads on investment-grade corporate bonds change little over the scenario period, as do spreads on residential mortgages and other consumer loans. As a result, yields on BBB-rated corporate bonds and mortgage rates both increase roughly in line with long-term Treasury yields, and the prime rate increases roughly in line with short-term Treasury rates.

Consistent with these developments, asset prices are assumed to increase modestly in the baseline scenario. Equity prices, nominal house prices, and commercial property prices all rise steadily throughout the scenario; in addition, equity market volatility is assumed to remain at low levels.

The baseline outlook for the international variables (see Table 1B) is similar to that reported in the October 2014 *Blue Chip Economic Indicators* and the International Monetary Fund's October 2014 *World Economic Outlook*.[5] The baseline scenario for economic activity and inflation outside the United States features an expansion in activity, albeit one that proceeds at different rates across the four countries or country blocks being considered. The outlook for real GDP growth in developing Asia is 6¼ percent per year; the expansion in real output in the United Kingdom proceeds at 2½ percent per year; and real GDP growth in the euro area and Japan is assumed to average 1½ percent per year and 1¼ percent per year, respectively.

Adverse Scenario

This year's adverse scenario is characterized by a global weakening in economic activity and an increase in U.S. inflationary pressures that, overall, result in a rapid increase in both short- and long-term U.S. Treasury rates. In the scenario, bank funding costs react strongly to rising short-term rates, as described in greater detail in "Additional Key Features of the Adverse Scenario." This scenario is not a forecast; rather, it is a hypothetical scenario designed to assess the strength of banking organizations and their resilience to an unfavorable economic environment.

In the adverse scenario, the United States experiences a mild recession that begins in the fourth quarter of 2014 and lasts through the second quarter of 2015 (see Table 2A). During this period, the level of real GDP falls approximately ½ percent relative to its level in the third quarter of 2014 and the unemployment rate increases to just over 7 percent. At the same time, the U.S. economy experiences a considerable rise in core inflation that results in a headline CPI inflation rate of 4 percent by the third quarter of 2015; headline inflation remains elevated thereafter. Short-term interest rates rise quickly as a result, reaching a little over 2½ percent by the end of 2015 and 5¼ percent by the end of 2017. Longer-term Treasury yields increase by less, resulting in a yield curve throughout the scenario period that is both higher and flatter relative to the baseline. Corporate financial conditions tighten, reflecting both higher long-term Treasury yields and somewhat wider investment-grade corporate bond spreads. Household financial conditions are assumed to tighten broadly in line with movements in similar-maturity Treasury yields.

The recovery that begins in the second half of 2015 is quite sluggish and the unemployment rate continues to increase, reaching 8 percent in the fourth quarter of 2016, and flattens thereafter. Equity prices fall both during and after the recession and by the end of the scenario are about 25 percent lower than in the third quarter of 2014; equity market volatility also rises somewhat. House prices and commercial real estate prices decline by approximately 13 and 16 percent, respectively, relative to their level in the third quarter of 2014.

Outside the United States, the adverse scenario features recessions in the euro area, the United Kingdom, and Japan, and below-trend growth in developing Asia (see Table 2B). This weakness in economic activity results in a period of deflation for some countries or country blocks: The euro area experiences modest price declines for the first year of the scenario, and in Japan there is a sustained period of deflation with price declines that are steeper than

[5] See International Monetary Fund (2014), "World Economic Outlook," www.imf.org/external/pubs/ft/weo/2014/02.

those for the euro area. The exchange value of the dollar is little changed vis-à-vis the euro, the pound sterling, and the currencies of developing Asia relative to the baseline scenario; the dollar is assumed to depreciate against the yen, reflecting flight-to-safety capital flows.

This adverse scenario is qualitatively different from last year's adverse scenario released in November 2013.[6] The main difference lies in the evolution of Treasury yields; in particular, the adverse scenario issued last year featured a general aversion of investors to long-term fixed-income assets worldwide that in turn resulted in a sharp rise in long-term interest rates and hence a steeper yield curve than in the corresponding baseline scenario. By contrast, in this year's adverse scenario, the hypothetical pick-up in U.S. inflation results in a yield curve that is higher and flatter than in the baseline. (This year's adverse scenario is broadly similar to the 2013 adverse scenario released in November 2012.[7])

Additional Key Features of the Adverse Scenario. The economic slowdown in the euro area should be interpreted as a broad-based contraction in euro-area demand, rather than as a development that is concentrated in a few euro-area countries. Similarly, the slowdown in developing Asia featured in this year's adverse scenario should be interpreted as a weakening in economic conditions across all emerging market economies and not simply as a phenomenon specific to the developing Asia region. Regarding property prices, the decline in aggregate U.S. house prices described earlier should be viewed as particularly relevant for states or metropolitan areas that have experienced brisk gains in house prices during the past couple of years. The decline in U.S. property prices should be interpreted as being representative of risks to property prices among those foreign economies where property prices are currently elevated.

As described earlier, firms should interpret the rise in short-term interest rates embodied in this year's adverse scenario as crystallizing certain risks to banks' funding costs. In particular, commercial deposits should be viewed as being unusually drawn to institutional money funds, which re-price promptly in response to changes in short-term Treasury rates. Consumer deposits should also be assumed to be drawn to higher-yielding alternatives.

Severely Adverse Scenario

The severely adverse scenario features a substantial weakening in global economic activity, accompanied by large reductions in asset prices. In the scenario, the U.S. corporate sector experiences increases in financial distress that are even larger than would be expected in a severe recession, together with a widening in corporate bond spreads and a decline in equity prices. The scenario also includes a rise in oil prices (Brent crude) to approximately $110 per barrel. These elements of the scenario are described in greater detail in "Additional Key Features of the Severely Adverse Scenario." As with the other scenarios described in this document, this scenario is not a forecast, but rather a hypothetical sequence of events designed to assess the strength of banking organizations and their resilience to a severely adverse economic environment.

The severely adverse scenario for the United States is characterized by a deep and prolonged recession in which the unemployment rate increases by 4 percentage points from its level in the third quarter of 2014, peaking at 10 percent in the middle of 2016 (see Table 3A). In terms of both the peak level reached by the unemployment rate and its total increase, this shock is of a similar magnitude to those experienced in severe U.S. contractions during the past half-century. By the end of 2015, the level of real GDP is approximately 4½ percent lower than its level in the third quarter of 2014; it begins to recover thereafter. Despite this decline in real activity, higher oil prices cause the annualized rate of change in the CPI to reach 4¼ percent in the near term, before subsequently falling back.

In response to this economic contraction—and despite the higher near-term path of CPI inflation—Treasury yields of all maturities are significantly lower throughout the scenario than in the baseline. Short-term interest rates remain near zero through 2017; long-term Treasury yields drop to 1 percent in the fourth quarter of 2014 and then edge up slowly over the remainder of the scenario period. Driven by the assumed decline in corporate credit quality, spreads on investment-grade corporate bonds jump from about 170 basis points to 500 basis points at their peak. As a result, despite lower long-term Treas-

[6] The 2014 Supervisory Scenarios for Annual Stress Tests Required under the Dodd-Frank Act Stress Testing Rules and the Capital Plan Rule are available at www.federalreserve.gov/bankinforeg/stress-tests/supervisory-baseline-adverse-and-severely-adverse-scenarios.htm.

[7] The 2013 Supervisory Scenarios for Annual Stress Tests Required under the Dodd-Frank Act Stress Testing Rules and the Capital Plan Rule are available at www.federalreserve.gov/newsevents/press/bcreg/bcreg20121115a1.pdf.

ury yields, corporate financial conditions tighten significantly in 2015 and the yield on investment-grade corporate bonds is higher than the baseline until the fourth quarter of 2016. Mortgage rates also increase over the course of 2015, driven by some widening in spreads.

Consistent with these developments, asset prices contract sharply in the scenario. Equity prices fall by approximately 60 percent from the third quarter of 2014 through the fourth quarter of 2015, and equity market volatility increases sharply. House prices decline by approximately 25 percent during the scenario period relative to their level in the third quarter of 2014, while commercial real estate prices are more than 30 percent lower at their trough.

The international component of the severely adverse scenario (see Table 3B) features severe recessions in the euro area, the United Kingdom, and Japan; and below-trend growth in developing Asia. For economies that are heavily dependent on imported oil—including developing Asia, Japan, and the euro area—this economic weakness is exacerbated by the rise in oil prices featured in this scenario. The euro-area recession begins in the fourth quarter of 2014, and the economy continues to contract through the fourth quarter of 2015; the level of euro-area real GDP contracts by 5 percent during the recession. The United Kingdom also experiences a recession in 2015 and its real GDP falls by almost 3½ percent relative to the level in the third quarter of 2014. Economic activity is assumed to weaken materially for two quarters in developing Asia before rebounding strongly, while the adverse effects on Japanese real GDP are assumed to persist so that the level of Japan's real GDP is approximately 10½ percent lower by the end of the second quarter of 2016 than in the third quarter of 2014.

Reflecting flight-to-safety capital flows associated with the scenario's global recession, the U.S. dollar is assumed to appreciate strongly against the euro and the currencies of developing Asia, and to appreciate more modestly against the pound sterling. The dollar is assumed to depreciate modestly against the yen, also reflecting flight-to-safety capital flows.

This year's severely adverse scenario is similar to last year's severely adverse scenario released in November 2013.[8] The significant differences from last year include the somewhat larger widening in corporate bond spreads and the increase in the price of oil that are assumed in this year's scenario.

Additional Key Features of the Severely Adverse Scenario. As with the adverse scenario, the economic slowdown in the euro area should be interpreted as a broad-based contraction in euro-area demand, rather than as a development concentrated in a few euro-area countries. In this year's severely adverse scenario, part of the sharp slowdown in activity in developing Asia reflects the region's relatively high degree of oil dependence. As such, not all of the severe weakening in economic conditions in developing Asia is shared by other emerging market economies. As is the case for the adverse scenario, firms should view the large decline in aggregate U.S. house prices described in the severely adverse scenario as being particularly relevant for states or metropolitan areas that have experienced brisk gains in house prices during the past couple of years, and the large decline in U.S. property prices assumed in the scenario should be interpreted as being representative of risks to property prices in those foreign economies where property prices are elevated.

As mentioned earlier, in this year's severely adverse scenario, U.S. corporate credit quality deteriorates sharply. As in last year's scenario, this deterioration is particularly concentrated in riskier firms. Investors pull back from a variety of assets linked to risky corporate borrowers and, in particular, highly leveraged corporations. Spreads on assets linked to these corporations, particularly high-yield bonds, leveraged loans, and collateralized loan obligations (CLOs) backed by leveraged loans, widen to levels the same as the peaks reached in the 2007–2009 recession.

Global Market Shock Components for Supervisory Adverse and Severely Adverse Scenarios

The global market shock components are one-time, hypothetical shocks to a large set of risk factors. Generally, these shocks involve large and sudden changes in asset prices, interest rates, and spreads, reflecting general market dislocation and heightened

[8] The 2014 Supervisory Scenarios for Annual Stress Tests Required under the Dodd-Frank Act Stress Testing Rules and the Capital Plan Rule are available at www.federalreserve.gov/bankinforeg/stress-tests/supervisory-baseline-adverse-and-severely-adverse-scenarios.htm.

uncertainty.[9] BHCs with significant trading activity will be required to include the global market shock as part of their supervisory adverse and severely adverse scenarios.[10] In addition, as discussed below, certain large and highly interconnected BHCs must apply the same global market shocks to their counterparty exposures to project losses under the counterparty default scenario component. The as-of date for the global market shock is October 6, 2014. A BHC may use data as of the date that corresponds to its weekly internal risk reporting cycle as long as it falls during the business week of the as-of date for the global market shock (i.e., October 6, 2014 to October 10, 2014).

It is important to note that global market shocks included in the adverse and severely adverse scenarios are not forecasts, but rather are hypothetical scenarios designed to assess the strength and resilience of banking organizations in the event of sudden and significant deterioration in market environments.

The Federal Reserve will make the data for the global market shock components available no later than December 1, 2014.

Severely Adverse Scenario

The market shock component for the severely adverse scenario is built around a sudden sharp increase in general risk premiums and credit risk, combined with significant market illiquidity, associated, in part, with the distress of one or more large leveraged entities that rapidly sell a variety of assets into an already fragile market. Under the scenario, severe declines in the value of credit positions have immediate implications for less liquid products as investors attempt to rapidly exit these positions—specifically, private equity, securitizations, and exposures to emerging markets. While most declines are comparable to those experienced in 2008, products with favorable current market valuations are assumed to experience greater declines. Notably, mortgage-backed securities are among the assets being liquidated by distressed, leveraged entities, causing significant increases in the option-adjusted spreads on agency mortgage-backed securities.

Globally, government yield curves undergo marked shifts in level and shape due to market participants' risk aversion. The flight-to-quality pushes rates down across the term structure in the United States and certain European countries, while emerging markets and countries that are part of the so-called European periphery experience sharp increases in government yields. The magnitudes of the increases in rates vary, with jumps in European periphery spreads, and emerging markets rates approximating the moves experienced during periods of stress during 2011 and 2008, respectively. Countries that are affected by the flight-to-quality also experience currency appreciation. Fears of a prolonged and potentially more acute recession in Europe drive up sovereign CDS spreads in a manner generally consistent with the experience of 2011.

Adverse Scenario

The core of the global market shock component for the adverse scenario consists of market shocks that are, by and large, similar in structure, but not as severe as those assumed in the severely adverse scenario. However, rates across the term structure in the United States and Europe increase, as the flight to quality mainly affects the short end of the yield curve while an aversion to long-term assets prevails. In addition, the increase in implied volatilities for equities is more subdued than what is typically associated with the level of the equity price declines in the adverse scenario.

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[9] The global market shock components consist of shocks to a large number of risk factors that include a wide range of financial market variables that affect asset prices, such as a credit spread or the yield on a bond, and, also include, in some cases, shocks to the value of the position itself (for example, the market value of private-equity positions).

[10] For this cycle, six BHCs are subject to the global market shock components: Bank of America Corporation; Citigroup Inc.; The Goldman Sachs Group, Inc.; JPMorgan Chase & Co.; Morgan Stanley; and Wells Fargo & Company. See 12 CFR 252.54(b)(2)(i).

Counterparty Default Component for Supervisory Adverse and Severely Adverse Scenarios

For CCAR 2015, certain large and highly interconnected firms must include a counterparty default scenario component in the adverse and severely adverse scenarios.[11] In connection with the counterparty default scenario component, these BHCs will be required to estimate and report the potential losses and related effects on capital associated with the instantaneous and unexpected default of the counterparty that would generate the largest losses across their derivatives and securities financing activities, including securities lending, and repurchase or reverse repurchase agreement activities. The counterparty default scenario component is an add-on to the macroeconomic conditions and financial market environment specified in the Federal Reserve's adverse and severely adverse stress scenarios.

The counterparty default scenario component involves the instantaneous and unexpected default of the BHC's largest counterparty.[12] Each BHC's largest counterparty will be determined by net stressed losses; estimated by applying the global market shock to revalue non-cash securities financing activity assets (securities or collateral) posted or received; and for derivatives, to the value of the trade position and non-cash collateral exchanged. The as-of date for the counterparty default scenario component is October 6, 2014—the same date as the global market shock. As with the global market shock, a BHC may use data as of the date that corresponds to its weekly internal risk reporting cycle as long as it falls during the business week of the as-of date for the counterparty default scenario component (i.e., October 6, 2014, to October 10, 2014).

[11] Eight BHCs are subject to the counterparty default scenario component: Bank of America Corporation; The Bank of New York Mellon Corp.; Citigroup Inc.; The Goldman Sachs Group, Inc.; JPMorgan Chase & Co.; Morgan Stanley; State Street Corp.; and Wells Fargo & Company. See 12 CFR 252.54(b)(2)(ii).

[12] In selecting its largest counterparty, a BHC will not consider certain sovereign entities (Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States) or designated central clearing counterparties.

Variables Considered in Scenarios

Table 1A. Supervisory baseline scenario: Domestic, Q1:2001–Q4:2017
Percent unless otherwise indicated

													Level			
Date	Real GDP growth	Nominal GDP growth	Real dispo-sable income growth	Nominal dispo-sable income growth	Unemploy-ment rate	CPI inflation rate	3-month Treasury rate	5-year Treasury yield	10-year Treasury yield	BBB corporate yield	Mortgage rate	Prime rate	Dow Jones Total Stock Market Index	House Price Index	Com-mercial Real Estate Price Index	Market Volatility Index
Q1 2001	-1.1	1.4	3.5	6.3	4.2	3.9	4.8	4.9	5.3	7.4	7.0	8.6	10645.9	113.2	139.5	32.8
Q2 2001	2.1	5.1	-0.3	1.6	4.4	2.8	3.7	4.9	5.5	7.5	7.1	7.3	11407.2	115.2	138.6	34.7
Q3 2001	-1.3	0.0	9.8	10.1	4.8	1.1	3.2	4.6	5.3	7.3	7.0	6.6	9563.0	117.5	141.0	43.7
Q4 2001	1.1	2.3	-4.9	-4.6	5.5	-0.3	1.9	4.2	5.1	7.2	6.8	5.2	10707.7	119.8	135.6	35.3
Q1 2002	3.7	5.1	10.1	10.9	5.7	1.3	1.7	4.5	5.4	7.6	7.0	4.8	10775.7	122.1	137.4	26.1
Q2 2002	2.2	3.8	2.0	5.2	5.8	3.2	1.7	4.5	5.4	7.6	6.8	4.8	9384.0	125.4	135.8	28.4
Q3 2002	2.0	3.8	-0.5	1.5	5.7	2.2	1.6	3.4	4.5	7.3	6.3	4.8	7773.6	128.7	138.7	45.1
Q4 2002	0.3	2.4	1.9	3.8	5.9	2.4	1.3	3.1	4.3	7.0	6.1	4.5	8343.2	131.3	142.5	42.6
Q1 2003	2.1	4.6	1.1	4.0	5.9	4.2	1.2	2.9	4.2	6.5	5.8	4.3	8051.9	134.1	147.9	34.7
Q2 2003	3.8	5.1	5.9	6.3	6.1	-0.7	1.0	2.6	3.8	5.7	5.5	4.2	9342.4	137.0	149.2	29.1
Q3 2003	6.9	9.3	6.7	9.3	6.1	3.0	0.9	3.1	4.4	6.0	6.0	4.0	9649.7	141.1	147.3	22.7
Q4 2003	4.8	6.8	1.6	3.3	5.8	1.5	0.9	3.2	4.4	5.8	5.9	4.0	10799.6	146.0	145.7	21.1
Q1 2004	2.3	5.9	2.9	6.1	5.7	3.4	0.9	3.0	4.1	5.5	5.6	4.0	11039.4	151.8	152.9	21.6
Q2 2004	3.0	6.6	4.0	7.0	5.6	3.2	1.1	3.7	4.7	6.1	6.2	4.0	11144.6	158.0	160.4	20.0
Q3 2004	3.7	6.3	2.1	4.5	5.4	2.6	1.5	3.5	4.4	5.8	5.9	4.4	10893.8	163.4	171.8	19.3
Q4 2004	3.5	6.4	5.1	8.5	5.4	4.4	2.0	3.5	4.3	5.4	5.7	4.9	11951.5	169.4	175.8	16.6
Q1 2005	4.3	8.3	-3.8	-1.8	5.3	2.0	2.5	3.9	4.4	5.4	5.8	5.4	11637.3	177.6	175.8	14.6
Q2 2005	2.1	5.1	3.2	6.0	5.1	2.7	2.9	3.9	4.2	5.5	5.7	5.9	11856.7	185.0	182.3	17.7
Q3 2005	3.4	7.3	2.1	6.6	5.0	6.2	3.4	4.0	4.3	5.5	5.8	6.4	12282.9	190.8	187.1	14.2
Q4 2005	2.3	5.4	3.4	6.6	5.0	3.8	3.8	4.4	4.6	5.9	6.2	7.0	12497.2	195.5	195.4	16.5
Q1 2006	4.9	8.2	9.5	11.5	4.7	2.1	4.4	4.6	4.7	6.0	6.2	7.4	13121.6	198.7	200.0	14.6
Q2 2006	1.2	4.5	0.6	3.7	4.6	3.7	4.7	5.0	5.2	6.5	6.6	7.9	12808.9	197.8	209.0	23.8
Q3 2006	0.4	3.2	1.2	4.1	4.6	3.8	4.9	4.8	5.0	6.4	6.6	8.3	13322.5	196.5	218.6	18.6
Q4 2006	3.2	4.6	5.3	4.6	4.4	-1.6	4.9	4.6	4.7	6.1	6.2	8.3	14215.8	196.5	217.3	12.7
Q1 2007	0.2	4.8	2.6	6.5	4.5	4.0	5.0	4.6	4.8	6.1	6.2	8.3	14354.0	194.0	227.1	19.6
Q2 2007	3.1	5.4	0.8	4.0	4.5	4.6	4.7	4.7	4.9	6.3	6.4	8.3	15163.1	189.1	236.4	18.9
Q3 2007	2.7	4.2	1.1	3.4	4.7	2.6	4.3	4.5	4.8	6.5	6.6	8.2	15317.8	183.6	249.1	30.8
Q4 2007	1.4	3.2	0.3	4.4	4.8	5.0	3.4	3.8	4.4	6.4	6.2	7.5	14753.6	178.1	251.5	31.1
Q1 2008	-2.7	-0.5	2.9	6.5	5.0	4.4	2.1	2.8	3.9	6.5	5.9	6.2	13284.1	171.2	239.9	32.2
Q2 2008	2.0	4.0	8.7	13.3	5.3	5.3	1.6	3.2	4.1	6.8	6.1	5.1	13016.4	163.9	223.9	24.1
Q3 2008	-1.9	0.8	-8.9	-5.1	6.0	6.3	1.5	3.1	4.1	7.2	6.3	5.0	11826.0	157.3	233.4	46.7
Q4 2008	-8.2	-7.7	2.6	-3.2	6.9	-8.9	0.3	2.2	3.7	9.4	5.8	4.1	9056.7	149.2	222.5	80.9
Q1 2009	-5.4	-4.5	-0.8	-3.0	8.3	-2.7	0.2	1.9	3.2	9.0	5.1	3.3	8044.2	143.1	208.9	56.7
Q2 2009	-0.5	-1.2	2.9	4.7	9.3	2.1	0.2	2.3	3.7	8.2	5.0	3.3	9342.8	142.9	178.5	42.3
Q3 2009	1.3	1.2	-4.3	-1.9	9.6	3.5	0.2	2.5	3.8	6.8	5.1	3.3	10812.8	144.1	154.0	31.3
Q4 2009	3.9	5.2	-0.5	2.2	9.9	3.2	0.1	2.3	3.7	6.1	4.9	3.3	11385.1	145.0	155.2	30.7
Q1 2010	1.7	3.2	0.4	1.8	9.8	0.6	0.1	2.4	3.9	5.8	5.0	3.3	12032.5	145.5	149.8	27.3
Q2 2010	3.9	5.8	5.3	5.8	9.6	0.0	0.1	2.3	3.6	5.6	4.9	3.3	10645.8	144.4	164.5	45.8
Q3 2010	2.7	4.6	2.0	3.2	9.5	1.2	0.2	1.6	2.9	5.1	4.4	3.3	11814.0	141.3	166.9	32.9

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Table 1A.—*continued*

													Level			
Date	Real GDP growth	Nominal GDP growth	Real dispo-sable income growth	Nominal dispo-sable income growth	Unemploy-ment rate	CPI inflation rate	3-month Treasury rate	5-year Treasury yield	10-year Treasury yield	BBB corporate yield	Mortgage rate	Prime rate	Dow Jones Total Stock Market Index	House Price Index	Com-mercial Real Estate Price Index	Market Volatility Index
Q4 2010	2.5	4.7	2.8	5.0	9.6	3.1	0.1	1.5	3.0	5.0	4.4	3.3	13131.5	140.0	172.7	23.5
Q1 2011	-1.5	0.2	5.0	8.2	9.0	4.2	0.1	2.1	3.5	5.4	4.8	3.3	13908.5	138.1	179.6	29.4
Q2 2011	2.9	6.0	-0.6	3.5	9.1	5.0	0.0	1.8	3.3	5.1	4.7	3.3	13843.5	137.3	177.0	22.7
Q3 2011	0.8	3.3	2.1	4.3	9.0	2.6	0.0	1.1	2.5	4.9	4.3	3.3	11676.5	137.3	177.0	48.0
Q4 2011	4.6	5.2	0.2	1.6	8.6	1.6	0.0	1.0	2.1	5.0	4.0	3.3	13019.3	137.1	188.4	45.5
Q1 2012	2.3	4.4	6.8	9.1	8.2	2.1	0.1	0.9	2.1	4.7	3.9	3.3	14627.5	139.3	188.2	23.0
Q2 2012	1.6	3.5	2.3	3.7	8.2	1.4	0.1	0.8	1.8	4.5	3.8	3.3	14100.2	142.5	189.4	26.7
Q3 2012	2.5	4.4	-0.4	0.9	8.0	1.7	0.1	0.7	1.6	4.2	3.6	3.3	14894.7	145.4	196.6	20.5
Q4 2012	0.1	1.6	11.8	13.8	7.8	2.4	0.1	0.7	1.7	3.9	3.4	3.3	14834.9	148.9	198.3	22.7
Q1 2013	2.7	4.2	-12.6	-11.7	7.7	1.2	0.1	0.8	1.9	4.0	3.5	3.3	16396.2	153.8	203.2	19.0
Q2 2013	1.8	2.9	3.8	4.3	7.5	0.4	0.1	0.9	2.0	4.1	3.7	3.3	16771.3	158.7	212.4	20.5
Q3 2013	4.5	6.2	2.0	3.7	7.2	2.2	0.0	1.5	2.7	4.9	4.4	3.3	17718.3	162.6	222.8	17.0
Q4 2013	3.5	5.0	0.2	1.2	7.0	1.1	0.1	1.4	2.8	4.8	4.3	3.3	19413.2	166.4	229.2	20.3
Q1 2014	-2.1	-0.8	3.4	4.8	6.7	1.9	0.0	1.6	2.8	4.6	4.4	3.3	19711.2	169.7	227.6	21.4
Q2 2014	4.6	6.8	4.4	6.8	6.2	3.0	0.0	1.7	2.7	4.3	4.2	3.3	20568.7	170.8	233.0	17.0
Q3 2014	3.1	3.8	2.7	3.6	6.1	1.1	0.0	1.7	2.5	4.2	4.1	3.3	20458.8	172.1	236.0	17.0
Q4 2014	3.0	3.9	2.7	3.8	5.9	1.6	0.1	1.9	2.7	4.3	4.3	3.3	20683.7	173.2	238.9	18.1
Q1 2015	2.9	4.2	2.9	4.4	5.8	1.9	0.1	2.0	2.9	4.6	4.5	3.3	20926.1	174.3	241.9	18.6
Q2 2015	2.9	4.5	2.7	4.3	5.7	2.0	0.3	2.3	3.1	4.8	4.7	3.4	21186.1	175.3	245.0	19.2
Q3 2015	2.9	4.7	2.7	4.4	5.6	2.1	0.6	2.5	3.3	5.0	4.9	3.7	21457.4	176.4	248.1	19.6
Q4 2015	2.9	4.9	2.8	4.6	5.4	2.1	0.9	2.7	3.5	5.1	5.1	4.0	21739.5	177.6	251.2	19.5
Q1 2016	2.9	4.7	2.9	4.7	5.4	2.1	1.4	3.0	3.6	5.3	5.2	4.5	22015.5	178.9	253.1	20.9
Q2 2016	2.9	4.8	2.9	4.7	5.4	2.2	1.8	3.2	3.7	5.4	5.4	4.9	22304.2	180.2	255.0	20.7
Q3 2016	2.9	4.9	2.9	4.8	5.3	2.2	2.1	3.4	3.9	5.5	5.5	5.2	22598.2	181.6	256.9	21.2
Q4 2016	2.9	4.9	2.9	4.8	5.3	2.3	2.4	3.6	4.0	5.6	5.6	5.4	22898.0	183.0	258.8	21.3
Q1 2017	2.7	4.8	3.1	5.1	5.3	2.3	2.6	3.7	4.1	5.8	5.7	5.7	23196.2	184.3	260.8	21.7
Q2 2017	2.7	4.8	2.8	4.9	5.3	2.3	2.8	3.8	4.2	5.8	5.8	5.9	23497.5	185.7	262.7	21.7
Q3 2017	2.6	4.8	2.8	4.8	5.3	2.4	3.0	3.9	4.2	5.9	5.9	6.1	23801.1	187.1	264.7	21.9
Q4 2017	2.6	4.7	2.7	4.8	5.3	2.4	3.2	4.0	4.3	6.0	6.0	6.2	24107.6	188.5	266.7	22.0

Note: Refer to Notes Regarding Scenario Variables for more information on variables.

Table 1B. Supervisory baseline scenario: International, Q1:2001–Q4:2017
Percent unless otherwise indicated

Date	Euro area real GDP growth	Euro area inflation	Euro area bilateral dollar exchange rate (USD/euro)	Developing Asia real GDP growth	Developing Asia inflation	Developing Asia bilateral dollar exchange rate (F/USD, index)	Japan real GDP growth	Japan inflation	Japan bilateral dollar exchange rate (yen/USD)	U.K. real GDP growth	U.K. inflation	U.K. bilateral dollar exchange rate (USD/pound)
Q1 2001	3.7	1.1	0.879	4.0	1.6	106.0	2.6	-1.2	125.5	4.6	0.1	1.419
Q2 2001	0.3	4.1	0.847	5.9	2.0	106.1	-0.7	-0.3	124.7	3.1	3.1	1.408
Q3 2001	0.3	1.4	0.910	4.9	1.2	106.4	-4.3	-1.1	119.2	2.1	1.0	1.469
Q4 2001	0.6	1.7	0.890	7.7	0.1	106.8	-0.5	-1.4	131.0	1.3	0.0	1.454
Q1 2002	0.7	3.0	0.872	6.8	0.3	107.3	-0.9	-2.7	132.7	1.8	1.9	1.425
Q2 2002	2.1	2.0	0.986	9.0	1.1	104.7	4.3	1.7	119.9	3.3	0.9	1.525
Q3 2002	1.4	1.6	0.988	5.5	1.4	105.5	2.6	-0.7	121.7	3.6	1.4	1.570
Q4 2002	0.3	2.4	1.049	6.2	0.9	104.4	1.5	-0.4	118.8	3.7	1.9	1.610
Q1 2003	-0.9	3.3	1.090	7.0	3.5	105.5	-2.2	-1.6	118.1	3.9	1.6	1.579
Q2 2003	0.3	0.3	1.150	2.6	1.1	104.0	5.2	1.7	119.9	5.7	0.3	1.653
Q3 2003	2.1	2.2	1.165	13.4	0.0	102.6	1.7	-0.7	111.4	5.2	1.7	1.662
Q4 2003	3.1	2.2	1.260	11.8	5.7	103.3	4.2	-0.6	107.1	4.1	1.7	1.784
Q1 2004	1.9	2.3	1.229	5.1	4.0	101.4	3.8	-0.9	104.2	1.3	1.3	1.840
Q2 2004	2.2	2.4	1.218	6.1	4.1	102.7	0.3	1.1	109.4	1.2	1.0	1.813
Q3 2004	1.4	2.0	1.242	8.6	4.0	102.7	0.6	0.1	110.2	0.5	1.1	1.809
Q4 2004	1.5	2.4	1.354	7.9	0.8	98.9	-1.1	1.7	102.7	1.6	2.4	1.916
Q1 2005	0.4	1.5	1.297	7.9	2.9	98.6	0.8	-2.7	107.2	2.9	2.6	1.889
Q2 2005	2.8	2.2	1.210	7.6	1.5	98.9	5.3	-1.2	110.9	4.2	1.9	1.793
Q3 2005	2.9	3.2	1.206	9.5	2.3	98.5	1.4	-1.3	113.3	4.2	2.7	1.770
Q4 2005	2.5	2.5	1.184	10.5	1.8	98.1	0.7	0.7	117.9	5.5	1.4	1.719
Q1 2006	3.4	1.7	1.214	12.2	2.3	96.7	1.8	1.3	117.5	2.4	1.9	1.739
Q2 2006	4.8	2.5	1.278	7.8	3.2	96.6	1.7	-0.1	114.5	2.0	3.0	1.849
Q3 2006	2.5	2.0	1.269	8.8	2.1	96.2	-0.3	0.5	118.0	0.7	3.3	1.872
Q4 2006	4.4	0.9	1.320	10.7	3.7	94.5	5.2	-0.4	119.0	3.0	2.6	1.959
Q1 2007	3.2	2.2	1.337	14.8	3.6	93.9	4.1	-0.2	117.6	3.1	2.6	1.969
Q2 2007	2.3	2.3	1.352	10.1	4.9	91.9	0.5	0.0	123.4	2.4	1.6	2.006
Q3 2007	2.0	2.1	1.422	8.8	7.5	90.6	-1.5	0.1	115.0	3.4	0.3	2.039
Q4 2007	1.9	4.9	1.460	10.8	6.1	89.4	3.5	2.2	111.7	1.9	4.0	1.984
Q1 2008	2.7	4.2	1.581	8.2	8.1	88.0	2.7	1.3	99.9	1.3	3.7	1.986
Q2 2008	-1.6	3.2	1.575	7.6	6.3	88.6	-4.7	1.6	106.2	-0.9	5.6	1.991
Q3 2008	-2.3	3.2	1.408	4.2	2.9	91.4	-4.1	3.6	105.9	-6.5	5.9	1.780
Q4 2008	-7.1	-1.4	1.392	0.7	-0.9	92.2	-12.5	-2.2	90.8	-8.6	0.6	1.462
Q1 2009	-10.8	-1.1	1.326	3.3	-1.6	94.4	-15.0	-3.6	99.2	-7.0	-0.1	1.430
Q2 2009	-1.1	0.0	1.402	15.4	2.3	92.3	7.1	-1.7	96.4	-1.0	2.0	1.645
Q3 2009	1.3	1.1	1.463	12.5	4.0	91.3	0.2	-1.2	89.5	0.8	3.7	1.600
Q4 2009	1.8	1.6	1.433	8.3	5.2	90.7	7.1	-1.6	93.1	1.6	3.1	1.617
Q1 2010	2.0	1.7	1.353	9.2	4.3	89.8	6.1	0.8	93.4	2.1	4.0	1.519
Q2 2010	4.1	2.0	1.229	9.3	3.4	91.0	4.4	-1.0	88.5	4.0	3.0	1.495
Q3 2010	1.3	1.7	1.360	8.7	3.9	88.4	5.8	-1.9	83.5	2.6	2.5	1.573
Q4 2010	2.1	2.6	1.327	8.4	7.8	87.4	-2.2	1.1	81.7	0.1	4.0	1.539
Q1 2011	3.7	3.6	1.418	9.2	6.5	86.4	-6.9	-0.4	82.8	2.2	6.6	1.605
Q2 2011	0.1	3.2	1.452	7.1	5.8	85.3	-2.7	-0.4	80.6	0.9	4.5	1.607
Q3 2011	0.0	1.5	1.345	6.9	5.7	87.4	10.8	0.4	77.0	2.8	4.0	1.562
Q4 2011	-1.1	3.4	1.297	6.3	3.0	87.2	0.6	-0.8	77.0	-0.1	3.3	1.554
Q1 2012	-0.4	2.6	1.333	5.8	3.0	86.3	4.1	1.8	82.4	0.3	1.9	1.599
Q2 2012	-1.0	2.4	1.267	6.0	3.9	88.0	-2.2	-0.7	79.8	-0.7	1.9	1.569
Q3 2012	-0.4	1.8	1.286	6.5	2.3	86.2	-2.7	-1.7	77.9	3.4	2.7	1.613
Q4 2012	-1.9	2.3	1.319	7.5	3.7	85.9	-0.5	-0.1	86.6	-1.3	3.9	1.626
Q1 2013	-1.3	0.8	1.282	5.4	4.1	86.2	5.1	0.0	94.2	2.1	2.5	1.519
Q2 2013	1.3	0.7	1.301	6.1	3.0	87.1	3.4	0.8	99.2	2.7	1.8	1.521
Q3 2013	0.6	1.6	1.354	7.7	3.5	86.5	1.8	3.0	98.3	3.5	2.7	1.618

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Table 1B.—*continued*

Date	Euro area real GDP growth	Euro area inflation	Euro area bilateral dollar exchange rate (USD/euro)	Developing Asia real GDP growth	Developing Asia inflation	Developing Asia bilateral dollar exchange rate (F/USD, index)	Japan real GDP growth	Japan inflation	Japan bilateral dollar exchange rate (yen/USD)	U.K. real GDP growth	U.K. inflation	U.K. bilateral dollar exchange rate (USD/pound)
Q4 2013	1.0	0.1	1.378	6.9	4.0	85.6	-0.5	1.9	105.3	2.5	1.3	1.657
Q1 2014	1.2	0.2	1.378	5.1	1.4	86.7	6.0	0.4	103.0	3.0	1.2	1.668
Q2 2014	0.3	0.4	1.369	6.9	2.8	86.4	-7.1	9.4	101.3	3.7	1.8	1.711
Q3 2014	1.0	0.6	1.263	6.5	3.1	86.9	1.0	1.6	109.7	2.9	1.6	1.622
Q4 2014	1.2	1.0	1.271	6.5	3.2	86.8	1.2	2.2	107.6	2.8	1.9	1.630
Q1 2015	1.4	1.1	1.262	6.4	3.2	86.7	1.3	2.0	107.6	2.7	1.9	1.628
Q2 2015	1.5	1.1	1.247	6.3	3.2	86.7	1.3	2.0	108.3	2.5	1.9	1.620
Q3 2015	1.6	1.2	1.230	6.3	3.2	86.6	1.3	2.1	109.5	2.5	1.9	1.610
Q4 2015	1.7	1.3	1.213	6.3	3.3	86.5	1.3	2.2	110.6	2.4	2.0	1.599
Q1 2016	1.7	1.3	1.212	6.3	3.4	85.6	1.2	2.4	110.7	2.3	2.1	1.596
Q2 2016	1.7	1.4	1.214	6.3	3.5	84.6	1.2	2.5	110.5	2.3	2.1	1.594
Q3 2016	1.8	1.4	1.218	6.3	3.5	83.7	1.2	2.4	110.2	2.3	2.2	1.594
Q4 2016	1.7	1.5	1.222	6.3	3.5	82.8	1.2	2.2	109.8	2.3	2.1	1.594
Q1 2017	1.7	1.5	1.228	6.2	3.4	82.5	1.2	1.9	109.2	2.3	2.1	1.597
Q2 2017	1.7	1.5	1.234	6.1	3.4	82.2	1.2	1.7	108.7	2.3	2.1	1.600
Q3 2017	1.7	1.5	1.239	6.1	3.3	82.0	1.2	1.6	108.2	2.3	2.0	1.604
Q4 2017	1.7	1.5	1.244	6.1	3.4	81.8	1.2	1.7	107.8	2.3	2.1	1.607

Note: Refer to Notes Regarding Scenario Variables for more information on variables.

Table 2A. Supervisory adverse scenario: Domestic, Q1:2001–Q4:2017

Percent unless otherwise indicated

													Level			
Date	Real GDP growth	Nominal GDP growth	Real disposable income growth	Nominal disposable income growth	Unemployment rate	CPI inflation rate	3-month Treasury rate	5-year Treasury yield	10-year Treasury yield	BBB corporate yield	Mortgage rate	Prime rate	Dow Jones Total Stock Market Index	House Price Index	Commercial Real Estate Price Index	Market Volatility Index
Q1 2001	-1.1	1.4	3.5	6.3	4.2	3.9	4.8	4.9	5.3	7.4	7.0	8.6	10645.9	113.2	139.5	32.8
Q2 2001	2.1	5.1	-0.3	1.6	4.4	2.8	3.7	4.9	5.5	7.5	7.1	7.3	11407.2	115.2	138.6	34.7
Q3 2001	-1.3	0.0	9.8	10.1	4.8	1.1	3.2	4.6	5.3	7.3	7.0	6.6	9563.0	117.5	141.0	43.7
Q4 2001	1.1	2.3	-4.9	-4.6	5.5	-0.3	1.9	4.2	5.1	7.2	6.8	5.2	10707.7	119.8	135.6	35.3
Q1 2002	3.7	5.1	10.1	10.9	5.7	1.3	1.7	4.5	5.4	7.6	7.0	4.8	10775.7	122.1	137.4	26.1
Q2 2002	2.2	3.8	2.0	5.2	5.8	3.2	1.7	4.5	5.4	7.6	6.8	4.8	9384.0	125.4	135.8	28.4
Q3 2002	2.0	3.8	-0.5	1.5	5.7	2.2	1.6	3.4	4.5	7.3	6.3	4.8	7773.6	128.7	138.7	45.1
Q4 2002	0.3	2.4	1.9	3.8	5.9	2.4	1.3	3.1	4.3	7.0	6.1	4.5	8343.2	131.3	142.5	42.6
Q1 2003	2.1	4.6	1.1	4.0	5.9	4.2	1.2	2.9	4.2	6.5	5.8	4.3	8051.9	134.1	147.9	34.7
Q2 2003	3.8	5.1	5.9	6.3	6.1	-0.7	1.0	2.6	3.8	5.7	5.5	4.2	9342.4	137.0	149.2	29.1
Q3 2003	6.9	9.3	6.7	9.3	6.1	3.0	0.9	3.1	4.4	6.0	6.0	4.0	9649.7	141.1	147.3	22.7
Q4 2003	4.8	6.8	1.6	3.3	5.8	1.5	0.9	3.2	4.4	5.8	5.9	4.0	10799.6	146.0	145.7	21.1
Q1 2004	2.3	5.9	2.9	6.1	5.7	3.4	0.9	3.0	4.1	5.5	5.6	4.0	11039.4	151.8	152.9	21.6
Q2 2004	3.0	6.6	4.0	7.0	5.6	3.2	1.1	3.7	4.7	6.1	6.2	4.0	11144.6	158.0	160.4	20.0
Q3 2004	3.7	6.3	2.1	4.5	5.4	2.6	1.5	3.5	4.4	5.8	5.9	4.4	10893.8	163.4	171.8	19.3
Q4 2004	3.5	6.4	5.1	8.5	5.4	4.4	2.0	3.5	4.3	5.4	5.7	4.9	11951.5	169.4	175.8	16.6
Q1 2005	4.3	8.3	-3.8	-1.8	5.3	2.0	2.5	3.9	4.4	5.4	5.8	5.4	11637.3	177.6	175.8	14.6
Q2 2005	2.1	5.1	3.2	6.0	5.1	2.7	2.9	3.9	4.2	5.5	5.7	5.9	11856.7	185.0	182.3	17.7
Q3 2005	3.4	7.3	2.1	6.6	5.0	6.2	3.4	4.0	4.3	5.5	5.8	6.4	12282.9	190.8	187.1	14.2
Q4 2005	2.3	5.4	3.4	6.6	5.0	3.8	3.8	4.4	4.6	5.9	6.2	7.0	12497.2	195.5	195.4	16.5
Q1 2006	4.9	8.2	9.5	11.5	4.7	2.1	4.4	4.6	4.7	6.0	6.2	7.4	13121.6	198.7	200.0	14.6
Q2 2006	1.2	4.5	0.6	3.7	4.6	3.7	4.7	5.0	5.2	6.5	6.6	7.9	12808.9	197.8	209.0	23.8
Q3 2006	0.4	3.2	1.2	4.1	4.6	3.8	4.9	4.8	5.0	6.4	6.6	8.3	13322.5	196.5	218.6	18.6
Q4 2006	3.2	4.6	5.3	4.6	4.4	-1.6	4.9	4.6	4.7	6.1	6.2	8.3	14215.8	196.5	217.3	12.7
Q1 2007	0.2	4.8	2.6	6.5	4.5	4.0	5.0	4.6	4.8	6.1	6.2	8.3	14354.0	194.0	227.1	19.6
Q2 2007	3.1	5.4	0.8	4.0	4.5	4.6	4.7	4.7	4.9	6.3	6.4	8.3	15163.1	189.1	236.4	18.9
Q3 2007	2.7	4.2	1.1	3.4	4.7	2.6	4.3	4.5	4.8	6.5	6.6	8.2	15317.8	183.6	249.1	30.8
Q4 2007	1.4	3.2	0.3	4.4	4.8	5.0	3.4	3.8	4.4	6.4	6.2	7.5	14753.6	178.1	251.5	31.1
Q1 2008	-2.7	-0.5	2.9	6.5	5.0	4.4	2.1	2.8	3.9	6.5	5.9	6.2	13284.1	171.2	239.9	32.2
Q2 2008	2.0	4.0	8.7	13.3	5.3	5.3	1.6	3.2	4.1	6.8	6.1	5.1	13016.4	163.9	223.9	24.1
Q3 2008	-1.9	0.8	-8.9	-5.1	6.0	6.3	1.5	3.1	4.1	7.2	6.3	5.0	11826.0	157.3	233.4	46.7
Q4 2008	-8.2	-7.7	2.6	-3.2	6.9	-8.9	0.3	2.2	3.7	9.4	5.8	4.1	9056.7	149.2	222.5	80.9
Q1 2009	-5.4	-4.5	-0.8	-3.0	8.3	-2.7	0.2	1.9	3.2	9.0	5.1	3.3	8044.2	143.1	208.9	56.7
Q2 2009	-0.5	-1.2	2.9	4.7	9.3	2.1	0.2	2.3	3.7	8.2	5.0	3.3	9342.8	142.9	178.5	42.3
Q3 2009	1.3	1.2	-4.3	-1.9	9.6	3.5	0.2	2.5	3.8	6.8	5.1	3.3	10812.8	144.1	154.0	31.3
Q4 2009	3.9	5.2	-0.5	2.2	9.9	3.2	0.1	2.3	3.7	6.1	4.9	3.3	11385.1	145.0	155.2	30.7
Q1 2010	1.7	3.2	0.4	1.8	9.8	0.6	0.1	2.4	3.9	5.8	5.0	3.3	12032.5	145.5	149.8	27.3
Q2 2010	3.9	5.8	5.3	5.8	9.6	0.0	0.1	2.3	3.6	5.6	4.9	3.3	10645.8	144.4	164.5	45.8
Q3 2010	2.7	4.6	2.0	3.2	9.5	1.2	0.2	1.6	2.9	5.1	4.4	3.3	11814.0	141.3	166.9	32.9
Q4 2010	2.5	4.7	2.8	5.0	9.6	3.1	0.1	1.5	3.0	5.0	4.4	3.3	13131.5	140.0	172.7	23.5
Q1 2011	-1.5	0.2	5.0	8.2	9.0	4.2	0.1	2.1	3.5	5.4	4.8	3.3	13908.5	138.1	179.6	29.4
Q2 2011	2.9	6.0	-0.6	3.5	9.1	5.0	0.0	1.8	3.3	5.1	4.7	3.3	13843.5	137.3	177.0	22.7
Q3 2011	0.8	3.3	2.1	4.3	9.0	2.6	0.0	1.1	2.5	4.9	4.3	3.3	11676.5	137.3	177.0	48.0
Q4 2011	4.6	5.2	0.2	1.6	8.6	1.6	0.0	1.0	2.1	5.0	4.0	3.3	13019.3	137.1	188.4	45.5
Q1 2012	2.3	4.4	6.8	9.1	8.2	2.1	0.1	0.9	2.1	4.7	3.9	3.3	14627.5	139.3	188.2	23.0
Q2 2012	1.6	3.5	2.3	3.7	8.2	1.4	0.1	0.8	1.8	4.5	3.8	3.3	14100.2	142.5	189.4	26.7
Q3 2012	2.5	4.4	-0.4	0.9	8.0	1.7	0.1	0.7	1.6	4.2	3.6	3.3	14894.7	145.4	196.6	20.5
Q4 2012	0.1	1.6	11.8	13.8	7.8	2.4	0.1	0.7	1.7	3.9	3.4	3.3	14834.9	148.9	198.3	22.7
Q1 2013	2.7	4.2	-12.6	-11.7	7.7	1.2	0.1	0.8	1.9	4.0	3.5	3.3	16396.2	153.8	203.2	19.0
Q2 2013	1.8	2.9	3.8	4.3	7.5	0.4	0.1	0.9	2.0	4.1	3.7	3.3	16771.3	158.7	212.4	20.5
Q3 2013	4.5	6.2	2.0	3.7	7.2	2.2	0.0	1.5	2.7	4.9	4.4	3.3	17718.3	162.6	222.8	17.0

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Table 2A.—*continued*

													Level			
Date	Real GDP growth	Nominal GDP growth	Real disposable income growth	Nominal disposable income growth	Unemployment rate	CPI inflation rate	3-month Treasury rate	5-year Treasury yield	10-year Treasury yield	BBB corporate yield	Mortgage rate	Prime rate	Dow Jones Total Stock Market Index	House Price Index	Commercial Real Estate Price Index	Market Volatility Index
Q4 2013	3.5	5.0	0.2	1.2	7.0	1.1	0.1	1.4	2.8	4.8	4.3	3.3	19413.2	166.4	229.2	20.3
Q1 2014	-2.1	-0.8	3.4	4.8	6.7	1.9	0.0	1.6	2.8	4.6	4.4	3.3	19711.2	169.7	227.6	21.4
Q2 2014	4.6	6.8	4.4	6.8	6.2	3.0	0.0	1.7	2.7	4.3	4.2	3.3	20568.7	170.8	233.0	17.0
Q3 2014	3.1	3.8	2.7	3.6	6.1	1.1	0.0	1.7	2.5	4.2	4.1	3.3	20458.8	172.1	236.0	17.0
Q4 2014	-0.6	1.1	0.0	2.0	6.4	2.5	0.7	2.6	3.3	5.7	5.1	3.9	19418.4	170.8	238.9	28.9
Q1 2015	-1.3	0.9	-0.4	2.2	6.9	3.0	1.2	2.9	3.7	6.5	5.7	4.3	18508.7	168.0	235.3	32.9
Q2 2015	-0.2	2.8	-0.3	2.7	7.2	3.5	1.6	3.3	4.0	6.9	6.1	4.7	17689.2	164.8	228.1	33.2
Q3 2015	0.2	3.8	-0.1	3.5	7.4	4.0	2.1	3.7	4.3	7.0	6.3	5.2	16983.8	161.2	220.8	27.3
Q4 2015	0.3	4.1	0.0	3.6	7.6	4.0	2.6	4.0	4.6	7.1	6.6	5.7	16257.8	157.7	214.8	24.9
Q1 2016	0.8	4.3	1.0	4.7	7.8	4.0	3.1	4.3	4.8	7.4	6.8	6.2	15737.3	154.5	207.7	24.6
Q2 2016	1.2	4.9	1.1	4.8	7.9	4.0	3.6	4.5	5.0	7.5	7.0	6.7	15430.8	151.7	202.9	22.8
Q3 2016	1.7	5.4	1.4	5.1	7.9	4.0	4.0	4.8	5.2	7.5	7.1	7.1	15188.2	150.0	199.6	21.4
Q4 2016	1.8	5.4	1.5	5.2	8.0	4.0	4.4	5.0	5.4	7.6	7.3	7.5	14992.3	148.9	197.7	20.5
Q1 2017	1.8	5.4	1.8	5.5	8.0	4.0	4.7	5.2	5.5	7.6	7.4	7.8	14866.4	148.6	196.6	19.8
Q2 2017	1.9	5.5	1.6	5.2	8.0	3.9	5.0	5.3	5.7	7.7	7.5	8.0	14791.4	148.9	196.5	19.4
Q3 2017	2.0	5.5	1.6	5.1	8.0	3.8	5.2	5.5	5.8	7.7	7.6	8.2	14807.1	149.5	196.6	19.1
Q4 2017	2.2	5.5	1.7	5.1	8.0	3.6	5.3	5.5	5.8	7.7	7.6	8.4	15005.9	150.3	197.1	19.2

Note: Refer to Notes Regarding Scenario Variables for more information on variables.

Table 2B. Supervisory adverse scenario: International, Q1:2001–Q4:2017

Percent unless otherwise indicated

Date	Euro area real GDP growth	Euro area inflation	Euro area bilateral dollar exchange rate (USD/euro)	Developing Asia real GDP growth	Developing Asia inflation	Developing Asia bilateral dollar exchange rate (F/USD, index)	Japan real GDP growth	Japan inflation	Japan bilateral dollar exchange rate (yen/USD)	U.K. real GDP growth	U.K. inflation	U.K. bilateral dollar exchange rate (USD/pound)
Q1 2001	3.7	1.1	0.879	4.0	1.6	106.0	2.6	-1.2	125.5	4.6	0.1	1.419
Q2 2001	0.3	4.1	0.847	5.9	2.0	106.1	-0.7	-0.3	124.7	3.1	3.1	1.408
Q3 2001	0.3	1.4	0.910	4.9	1.2	106.4	-4.3	-1.1	119.2	2.1	1.0	1.469
Q4 2001	0.6	1.7	0.890	7.7	0.1	106.8	-0.5	-1.4	131.0	1.3	0.0	1.454
Q1 2002	0.7	3.0	0.872	6.8	0.3	107.3	-0.9	-2.7	132.7	1.8	1.9	1.425
Q2 2002	2.1	2.0	0.986	9.0	1.1	104.7	4.3	1.7	119.9	3.3	0.9	1.525
Q3 2002	1.4	1.6	0.988	5.5	1.4	105.5	2.6	-0.7	121.7	3.6	1.4	1.570
Q4 2002	0.3	2.4	1.049	6.2	0.9	104.4	1.5	-0.4	118.8	3.7	1.9	1.610
Q1 2003	-0.9	3.3	1.090	7.0	3.5	105.5	-2.2	-1.6	118.1	3.9	1.6	1.579
Q2 2003	0.3	0.3	1.150	2.6	1.1	104.0	5.2	1.7	119.9	5.7	0.3	1.653
Q3 2003	2.1	2.2	1.165	13.4	0.0	102.6	1.7	-0.7	111.4	5.2	1.7	1.662
Q4 2003	3.1	2.2	1.260	11.8	5.7	103.3	4.2	-0.6	107.1	4.1	1.7	1.784
Q1 2004	1.9	2.3	1.229	5.1	4.0	101.4	3.8	-0.9	104.2	1.3	1.3	1.840
Q2 2004	2.2	2.4	1.218	6.1	4.1	102.7	0.3	1.1	109.4	1.2	1.0	1.813
Q3 2004	1.4	2.0	1.242	8.6	4.0	102.7	0.6	0.1	110.2	0.5	1.1	1.809
Q4 2004	1.5	2.4	1.354	7.9	0.8	98.9	-1.1	1.7	102.7	1.6	2.4	1.916
Q1 2005	0.4	1.5	1.297	7.9	2.9	98.6	0.8	-2.7	107.2	2.9	2.6	1.889
Q2 2005	2.8	2.2	1.210	7.6	1.5	98.9	5.3	-1.2	110.9	4.2	1.9	1.793
Q3 2005	2.9	3.2	1.206	9.5	2.3	98.5	1.4	-1.3	113.3	4.2	2.7	1.770
Q4 2005	2.5	2.5	1.184	10.5	1.8	98.1	0.7	0.7	117.9	5.5	1.4	1.719
Q1 2006	3.4	1.7	1.214	12.2	2.3	96.7	1.8	1.3	117.5	2.4	1.9	1.739
Q2 2006	4.8	2.5	1.278	7.8	3.2	96.6	1.7	-0.1	114.5	2.0	3.0	1.849
Q3 2006	2.5	2.0	1.269	8.8	2.1	96.2	-0.3	0.5	118.0	0.7	3.3	1.872
Q4 2006	4.4	0.9	1.320	10.7	3.7	94.5	5.2	-0.4	119.0	3.0	2.6	1.959
Q1 2007	3.2	2.2	1.337	14.8	3.6	93.9	4.1	-0.2	117.6	3.1	2.6	1.969
Q2 2007	2.3	2.3	1.352	10.1	4.9	91.9	0.5	0.0	123.4	2.4	1.6	2.006
Q3 2007	2.0	2.1	1.422	8.8	7.5	90.6	-1.5	0.1	115.0	3.4	0.3	2.039
Q4 2007	1.9	4.9	1.460	10.8	6.1	89.4	3.5	2.2	111.7	1.9	4.0	1.984
Q1 2008	2.7	4.2	1.581	8.2	8.1	88.0	2.7	1.3	99.9	1.3	3.7	1.986
Q2 2008	-1.6	3.2	1.575	7.6	6.3	88.6	-4.7	1.6	106.2	-0.9	5.6	1.991
Q3 2008	-2.3	3.2	1.408	4.2	2.9	91.4	-4.1	3.6	105.9	-6.5	5.9	1.780
Q4 2008	-7.1	-1.4	1.392	0.7	-0.9	92.2	-12.5	-2.2	90.8	-8.6	0.6	1.462
Q1 2009	-10.8	-1.1	1.326	3.3	-1.6	94.4	-15.0	-3.6	99.2	-7.0	-0.1	1.430
Q2 2009	-1.1	0.0	1.402	15.4	2.3	92.3	7.1	-1.7	96.4	-1.0	2.0	1.645
Q3 2009	1.3	1.1	1.463	12.5	4.0	91.3	0.2	-1.2	89.5	0.8	3.7	1.600
Q4 2009	1.8	1.6	1.433	8.3	5.2	90.7	7.1	-1.6	93.1	1.6	3.1	1.617
Q1 2010	2.0	1.7	1.353	9.2	4.3	89.8	6.1	0.8	93.4	2.1	4.0	1.519
Q2 2010	4.1	2.0	1.229	9.3	3.4	91.0	4.4	-1.0	88.5	4.0	3.0	1.495
Q3 2010	1.3	1.7	1.360	8.7	3.9	88.4	5.8	-1.9	83.5	2.6	2.5	1.573
Q4 2010	2.1	2.6	1.327	8.4	7.8	87.4	-2.2	1.1	81.7	0.1	4.0	1.539
Q1 2011	3.7	3.6	1.418	9.2	6.5	86.4	-6.9	-0.4	82.8	2.2	6.6	1.605
Q2 2011	0.1	3.2	1.452	7.1	5.8	85.3	-2.7	-0.4	80.6	0.9	4.5	1.607
Q3 2011	0.0	1.5	1.345	6.9	5.7	87.4	10.8	0.4	77.0	2.8	4.0	1.562
Q4 2011	-1.1	3.4	1.297	6.3	3.0	87.2	0.6	-0.8	77.0	-0.1	3.3	1.554
Q1 2012	-0.4	2.6	1.333	5.8	3.0	86.3	4.1	1.8	82.4	0.3	1.9	1.599
Q2 2012	-1.0	2.4	1.267	6.0	3.9	88.0	-2.2	-0.7	79.8	-0.7	1.9	1.569
Q3 2012	-0.4	1.8	1.286	6.5	2.3	86.2	-2.7	-1.7	77.9	3.4	2.7	1.613
Q4 2012	-1.9	2.3	1.319	7.5	3.7	85.9	-0.5	-0.1	86.6	-1.3	3.9	1.626
Q1 2013	-1.3	0.8	1.282	5.4	4.1	86.2	5.1	0.0	94.2	2.1	2.5	1.519
Q2 2013	1.3	0.7	1.301	6.1	3.0	87.1	3.4	0.8	99.2	2.7	1.8	1.521
Q3 2013	0.6	1.6	1.354	7.7	3.5	86.5	1.8	3.0	98.3	3.5	2.7	1.618
Q4 2013	1.0	0.1	1.378	6.9	4.0	85.6	-0.5	1.9	105.3	2.5	1.3	1.657

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Table 2B.—*continued*

Date	Euro area real GDP growth	Euro area inflation	Euro area bilateral dollar exchange rate (USD/euro)	Developing Asia real GDP growth	Developing Asia inflation	Developing Asia bilateral dollar exchange rate (F/USD, index)	Japan real GDP growth	Japan inflation	Japan bilateral dollar exchange rate (yen/USD)	U.K. real GDP growth	U.K. inflation	U.K. bilateral dollar exchange rate (USD/pound)
Q1 2014	1.2	0.2	1.378	5.1	1.4	86.7	6.0	0.4	103.0	3.0	1.2	1.668
Q2 2014	0.3	0.4	1.369	6.9	2.8	86.4	-7.1	9.4	101.3	3.7	1.8	1.711
Q3 2014	1.0	0.6	1.263	6.5	3.1	86.9	1.0	1.6	109.7	2.9	1.6	1.622
Q4 2014	-4.1	-0.4	1.265	2.0	1.6	89.3	-4.6	-1.6	97.6	-1.6	0.1	1.680
Q1 2015	-3.3	-0.4	1.257	3.9	1.3	89.3	-6.0	-1.4	97.7	-1.7	0.1	1.676
Q2 2015	-1.7	-0.4	1.243	5.3	1.1	89.0	-5.0	-1.6	98.4	-0.9	0.1	1.668
Q3 2015	-0.5	-0.1	1.226	6.1	1.1	88.7	-3.7	-1.2	99.5	-0.1	0.3	1.656
Q4 2015	0.4	0.1	1.210	6.4	1.4	88.2	-2.5	-0.7	100.5	0.6	0.6	1.645
Q1 2016	1.1	0.4	1.209	6.5	1.6	86.8	-1.4	-0.2	100.7	1.2	0.9	1.641
Q2 2016	1.6	0.6	1.212	6.5	1.9	85.5	-0.5	0.3	100.6	1.7	1.2	1.638
Q3 2016	1.9	0.8	1.217	6.5	2.1	84.2	0.2	0.5	100.3	2.2	1.4	1.636
Q4 2016	2.1	0.9	1.222	6.5	2.2	82.9	0.7	0.6	100.2	2.5	1.6	1.633
Q1 2017	2.1	1.0	1.229	6.5	2.3	82.4	1.2	0.5	99.9	2.7	1.6	1.634
Q2 2017	2.1	1.1	1.236	6.5	2.4	81.9	1.4	0.6	99.6	2.8	1.7	1.634
Q3 2017	2.0	1.1	1.242	6.5	2.5	81.6	1.6	0.7	99.5	2.8	1.8	1.634
Q4 2017	2.0	1.2	1.248	6.6	2.6	81.3	1.7	0.9	99.3	2.8	1.8	1.635

Note: Refer to Notes Regarding Scenario Variables for more information on variables.

Table 3A. Supervisory severely adverse scenario: Domestic, Q1:2001–Q4:2017
Percent unless otherwise indicated

													Level			
Date	Real GDP growth	Nominal GDP growth	Real disposable income growth	Nominal disposable income growth	Unemployment rate	CPI inflation rate	3-month Treasury rate	5-year Treasury yield	10-year Treasury yield	BBB corporate yield	Mortgage rate	Prime rate	Dow Jones Total Stock Market Index	House Price Index	Commercial Real Estate Price Index	Market Volatility Index
Q1 2001	-1.1	1.4	3.5	6.3	4.2	3.9	4.8	4.9	5.3	7.4	7.0	8.6	10645.9	113.2	139.5	32.8
Q2 2001	2.1	5.1	-0.3	1.6	4.4	2.8	3.7	4.9	5.5	7.5	7.1	7.3	11407.2	115.2	138.6	34.7
Q3 2001	-1.3	0.0	9.8	10.1	4.8	1.1	3.2	4.6	5.3	7.3	7.0	6.6	9563.0	117.5	141.0	43.7
Q4 2001	1.1	2.3	-4.9	-4.6	5.5	-0.3	1.9	4.2	5.1	7.2	6.8	5.2	10707.7	119.8	135.6	35.3
Q1 2002	3.7	5.1	10.1	10.9	5.7	1.3	1.7	4.5	5.4	7.6	7.0	4.8	10775.7	122.1	137.4	26.1
Q2 2002	2.2	3.8	2.0	5.2	5.8	3.2	1.7	4.5	5.4	7.6	6.8	4.8	9384.0	125.4	135.8	28.4
Q3 2002	2.0	3.8	-0.5	1.5	5.7	2.2	1.6	3.4	4.5	7.3	6.3	4.8	7773.6	128.7	138.7	45.1
Q4 2002	0.3	2.4	1.9	3.8	5.9	2.4	1.3	3.1	4.3	7.0	6.1	4.5	8343.2	131.3	142.5	42.6
Q1 2003	2.1	4.6	1.1	4.0	5.9	4.2	1.2	2.9	4.2	6.5	5.8	4.3	8051.9	134.1	147.9	34.7
Q2 2003	3.8	5.1	5.9	6.3	6.1	-0.7	1.0	2.6	3.8	5.7	5.5	4.2	9342.4	137.0	149.2	29.1
Q3 2003	6.9	9.3	6.7	9.3	6.1	3.0	0.9	3.1	4.4	6.0	6.0	4.0	9649.7	141.1	147.3	22.7
Q4 2003	4.8	6.8	1.6	3.3	5.8	1.5	0.9	3.2	4.4	5.8	5.9	4.0	10799.6	146.0	145.7	21.1
Q1 2004	2.3	5.9	2.9	6.1	5.7	3.4	0.9	3.0	4.1	5.5	5.6	4.0	11039.4	151.8	152.9	21.6
Q2 2004	3.0	6.6	4.0	7.0	5.6	3.2	1.1	3.7	4.7	6.1	6.2	4.0	11144.6	158.0	160.4	20.0
Q3 2004	3.7	6.3	2.1	4.5	5.4	2.6	1.5	3.5	4.4	5.8	5.9	4.4	10893.8	163.4	171.8	19.3
Q4 2004	3.5	6.4	5.1	8.5	5.4	4.4	2.0	3.5	4.3	5.4	5.7	4.9	11951.5	169.4	175.8	16.6
Q1 2005	4.3	8.3	-3.8	-1.8	5.3	2.0	2.5	3.9	4.4	5.4	5.8	5.4	11637.3	177.6	175.8	14.6
Q2 2005	2.1	5.1	3.2	6.0	5.1	2.7	2.9	3.9	4.2	5.5	5.7	5.9	11856.7	185.0	182.3	17.7
Q3 2005	3.4	7.3	2.1	6.6	5.0	6.2	3.4	4.0	4.3	5.5	5.8	6.4	12282.9	190.8	187.1	14.2
Q4 2005	2.3	5.4	3.4	6.6	5.0	3.8	3.8	4.4	4.6	5.9	6.2	7.0	12497.2	195.5	195.4	16.5
Q1 2006	4.9	8.2	9.5	11.5	4.7	2.1	4.4	4.6	4.7	6.0	6.2	7.4	13121.6	198.7	200.0	14.6
Q2 2006	1.2	4.5	0.6	3.7	4.6	3.7	4.7	5.0	5.2	6.5	6.6	7.9	12808.9	197.8	209.0	23.8
Q3 2006	0.4	3.2	1.2	4.1	4.6	3.8	4.9	4.8	5.0	6.4	6.6	8.3	13322.5	196.5	218.6	18.6
Q4 2006	3.2	4.6	5.3	4.6	4.4	-1.6	4.9	4.6	4.7	6.1	6.2	8.3	14215.8	196.5	217.3	12.7
Q1 2007	0.2	4.8	2.6	6.5	4.5	4.0	5.0	4.6	4.8	6.1	6.2	8.3	14354.0	194.0	227.1	19.6
Q2 2007	3.1	5.4	0.8	4.0	4.5	4.6	4.7	4.7	4.9	6.3	6.4	8.3	15163.1	189.1	236.4	18.9
Q3 2007	2.7	4.2	1.1	3.4	4.7	2.6	4.3	4.5	4.8	6.5	6.6	8.2	15317.8	183.6	249.1	30.8
Q4 2007	1.4	3.2	0.3	4.4	4.8	5.0	3.4	3.8	4.4	6.4	6.2	7.5	14753.6	178.1	251.5	31.1
Q1 2008	-2.7	-0.5	2.9	6.5	5.0	4.4	2.1	2.8	3.9	6.5	5.9	6.2	13284.1	171.2	239.9	32.2
Q2 2008	2.0	4.0	8.7	13.3	5.3	5.3	1.6	3.2	4.1	6.8	6.1	5.1	13016.4	163.9	223.9	24.1
Q3 2008	-1.9	0.8	-8.9	-5.1	6.0	6.3	1.5	3.1	4.1	7.2	6.3	5.0	11826.0	157.3	233.4	46.7
Q4 2008	-8.2	-7.7	2.6	-3.2	6.9	-8.9	0.3	2.2	3.7	9.4	5.8	4.1	9056.7	149.2	222.5	80.9
Q1 2009	-5.4	-4.5	-0.8	-3.0	8.3	-2.7	0.2	1.9	3.2	9.0	5.1	3.3	8044.2	143.1	208.9	56.7
Q2 2009	-0.5	-1.2	2.9	4.7	9.3	2.1	0.2	2.3	3.7	8.2	5.0	3.3	9342.8	142.9	178.5	42.3
Q3 2009	1.3	1.2	-4.3	-1.9	9.6	3.5	0.2	2.5	3.8	6.8	5.1	3.3	10812.8	144.1	154.0	31.3
Q4 2009	3.9	5.2	-0.5	2.2	9.9	3.2	0.1	2.3	3.7	6.1	4.9	3.3	11385.1	145.0	155.2	30.7
Q1 2010	1.7	3.2	0.4	1.8	9.8	0.6	0.1	2.4	3.9	5.8	5.0	3.3	12032.5	145.5	149.8	27.3
Q2 2010	3.9	5.8	5.3	5.8	9.6	0.0	0.1	2.3	3.6	5.6	4.9	3.3	10645.8	144.4	164.5	45.8
Q3 2010	2.7	4.6	2.0	3.2	9.5	1.2	0.2	1.6	2.9	5.1	4.4	3.3	11814.0	141.3	166.9	32.9
Q4 2010	2.5	4.7	2.8	5.0	9.6	3.1	0.1	1.5	3.0	5.0	4.4	3.3	13131.5	140.0	172.7	23.5
Q1 2011	-1.5	0.2	5.0	8.2	9.0	4.2	0.1	2.1	3.5	5.4	4.8	3.3	13908.5	138.1	179.6	29.4
Q2 2011	2.9	6.0	-0.6	3.5	9.1	5.0	0.0	1.8	3.3	5.1	4.7	3.3	13843.5	137.3	177.0	22.7
Q3 2011	0.8	3.3	2.1	4.3	9.0	2.6	0.0	1.1	2.5	4.9	4.3	3.3	11676.5	137.3	177.0	48.0
Q4 2011	4.6	5.2	0.2	1.6	8.6	1.6	0.0	1.0	2.1	5.0	4.0	3.3	13019.3	137.1	188.4	45.5
Q1 2012	2.3	4.4	6.8	9.1	8.2	2.1	0.1	0.9	2.1	4.7	3.9	3.3	14627.5	139.3	188.2	23.0
Q2 2012	1.6	3.5	2.3	3.7	8.2	1.4	0.1	0.8	1.8	4.5	3.8	3.3	14100.2	142.5	189.4	26.7
Q3 2012	2.5	4.4	-0.4	0.9	8.0	1.7	0.1	0.7	1.6	4.2	3.6	3.3	14894.7	145.4	196.6	20.5
Q4 2012	0.1	1.6	11.8	13.8	7.8	2.4	0.1	0.7	1.7	3.9	3.4	3.3	14834.9	148.9	198.3	22.7
Q1 2013	2.7	4.2	-12.6	-11.7	7.7	1.2	0.1	0.8	1.9	4.0	3.5	3.3	16396.2	153.8	203.2	19.0
Q2 2013	1.8	2.9	3.8	4.3	7.5	0.4	0.1	0.9	2.0	4.1	3.7	3.3	16771.3	158.7	212.4	20.5
Q3 2013	4.5	6.2	2.0	3.7	7.2	2.2	0.0	1.5	2.7	4.9	4.4	3.3	17718.3	162.6	222.8	17.0

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Table 3A.—*continued*

													Level			
Date	Real GDP growth	Nominal GDP growth	Real disposable income growth	Nominal disposable income growth	Unemployment rate	CPI inflation rate	3-month Treasury rate	5-year Treasury yield	10-year Treasury yield	BBB corporate yield	Mortgage rate	Prime rate	Dow Jones Total Stock Market Index	House Price Index	Commercial Real Estate Price Index	Market Volatility Index
Q4 2013	3.5	5.0	0.2	1.2	7.0	1.1	0.1	1.4	2.8	4.8	4.3	3.3	19413.2	166.4	229.2	20.3
Q1 2014	-2.1	-0.8	3.4	4.8	6.7	1.9	0.0	1.6	2.8	4.6	4.4	3.3	19711.2	169.7	227.6	21.4
Q2 2014	4.6	6.8	4.4	6.8	6.2	3.0	0.0	1.7	2.7	4.3	4.2	3.3	20568.7	170.8	233.0	17.0
Q3 2014	3.1	3.8	2.7	3.6	6.1	1.1	0.0	1.7	2.5	4.2	4.1	3.3	20458.8	172.1	236.0	17.0
Q4 2014	-3.9	-2.8	-3.0	-0.1	6.9	4.3	0.1	0.4	0.9	4.7	4.2	3.3	17133.5	169.5	238.9	79.0
Q1 2015	-6.1	-4.7	-4.4	-2.3	8.0	3.0	0.1	0.4	1.0	5.6	4.6	3.3	12498.5	164.0	230.2	71.3
Q2 2015	-3.9	-2.4	-3.4	-2.2	8.8	1.7	0.1	0.4	1.2	6.0	4.8	3.3	10190.1	157.6	213.6	76.9
Q3 2015	-3.2	-1.7	-2.4	-1.4	9.5	1.3	0.1	0.4	1.3	6.3	5.0	3.3	8770.7	150.7	195.1	68.1
Q4 2015	-1.5	0.0	-1.5	-0.7	9.9	1.1	0.1	0.4	1.5	6.2	5.0	3.2	8606.3	144.3	177.6	48.1
Q1 2016	1.2	2.4	0.2	1.5	10.0	1.6	0.1	0.5	1.5	6.0	4.9	3.2	9087.3	138.4	164.4	38.4
Q2 2016	1.2	2.5	0.4	1.8	10.1	1.9	0.1	0.6	1.6	5.8	4.8	3.2	9607.2	133.4	157.4	30.7
Q3 2016	3.0	4.4	1.2	2.8	10.0	2.0	0.1	0.8	1.8	5.6	4.8	3.2	10480.7	130.4	154.4	25.5
Q4 2016	3.0	4.3	1.8	3.3	9.9	1.9	0.1	0.9	1.9	5.5	4.7	3.2	11521.4	128.4	154.6	21.6
Q1 2017	3.9	5.2	2.7	4.2	9.7	1.9	0.1	1.1	2.0	5.3	4.7	3.2	12894.7	127.9	156.1	18.7
Q2 2017	3.9	5.2	2.8	4.1	9.5	1.7	0.1	1.2	2.1	5.2	4.7	3.2	14079.2	128.4	159.6	17.6
Q3 2017	3.9	5.1	2.9	4.2	9.3	1.6	0.1	1.3	2.2	5.1	4.7	3.2	15430.3	129.5	164.0	16.4
Q4 2017	3.9	5.1	3.0	4.3	9.1	1.6	0.1	1.5	2.3	5.1	4.7	3.2	16487.6	131.0	169.1	16.5

Note: Refer to Notes Regarding Scenario Variables for more information on variables.

Table 3B. Supervisory severely adverse scenario: International, Q1:2001–Q4:2017
Percent unless otherwise indicated

Date	Euro area real GDP growth	Euro area inflation	Euro area bilateral dollar exchange rate (USD/euro)	Developing Asia real GDP growth	Developing Asia inflation	Developing Asia bilateral dollar exchange rate (F/USD, index)	Japan real GDP growth	Japan inflation	Japan bilateral dollar exchange rate (yen/USD)	U.K. real GDP growth	U.K. inflation	U.K. bilateral dollar exchange rate (USD/pound)
Q1 2001	3.7	1.1	0.879	4.0	1.6	106.0	2.6	-1.2	125.5	4.6	0.1	1.419
Q2 2001	0.3	4.1	0.847	5.9	2.0	106.1	-0.7	-0.3	124.7	3.1	3.1	1.408
Q3 2001	0.3	1.4	0.910	4.9	1.2	106.4	-4.3	-1.1	119.2	2.1	1.0	1.469
Q4 2001	0.6	1.7	0.890	7.7	0.1	106.8	-0.5	-1.4	131.0	1.3	0.0	1.454
Q1 2002	0.7	3.0	0.872	6.8	0.3	107.3	-0.9	-2.7	132.7	1.8	1.9	1.425
Q2 2002	2.1	2.0	0.986	9.0	1.1	104.7	4.3	1.7	119.9	3.3	0.9	1.525
Q3 2002	1.4	1.6	0.988	5.5	1.4	105.5	2.6	-0.7	121.7	3.6	1.4	1.570
Q4 2002	0.3	2.4	1.049	6.2	0.9	104.4	1.5	-0.4	118.8	3.7	1.9	1.610
Q1 2003	-0.9	3.3	1.090	7.0	3.5	105.5	-2.2	-1.6	118.1	3.9	1.6	1.579
Q2 2003	0.3	0.3	1.150	2.6	1.1	104.0	5.2	1.7	119.9	5.7	0.3	1.653
Q3 2003	2.1	2.2	1.165	13.4	0.0	102.6	1.7	-0.7	111.4	5.2	1.7	1.662
Q4 2003	3.1	2.2	1.260	11.8	5.7	103.3	4.2	-0.6	107.1	4.1	1.7	1.784
Q1 2004	1.9	2.3	1.229	5.1	4.0	101.4	3.8	-0.9	104.2	1.3	1.3	1.840
Q2 2004	2.2	2.4	1.218	6.1	4.1	102.7	0.3	1.1	109.4	1.2	1.0	1.813
Q3 2004	1.4	2.0	1.242	8.6	4.0	102.7	0.6	0.1	110.2	0.5	1.1	1.809
Q4 2004	1.5	2.4	1.354	7.9	0.8	98.9	-1.1	1.7	102.7	1.6	2.4	1.916
Q1 2005	0.4	1.5	1.297	7.9	2.9	98.6	0.8	-2.7	107.2	2.9	2.6	1.889
Q2 2005	2.8	2.2	1.210	7.6	1.5	98.9	5.3	-1.2	110.9	4.2	1.9	1.793
Q3 2005	2.9	3.2	1.206	9.5	2.3	98.5	1.4	-1.3	113.3	4.2	2.7	1.770
Q4 2005	2.5	2.5	1.184	10.5	1.8	98.1	0.7	0.7	117.9	5.5	1.4	1.719
Q1 2006	3.4	1.7	1.214	12.2	2.3	96.7	1.8	1.3	117.5	2.4	1.9	1.739
Q2 2006	4.8	2.5	1.278	7.8	3.2	96.6	1.7	-0.1	114.5	2.0	3.0	1.849
Q3 2006	2.5	2.0	1.269	8.8	2.1	96.2	-0.3	0.5	118.0	0.7	3.3	1.872
Q4 2006	4.4	0.9	1.320	10.7	3.7	94.5	5.2	-0.4	119.0	3.0	2.6	1.959
Q1 2007	3.2	2.2	1.337	14.8	3.6	93.9	4.1	-0.2	117.6	3.1	2.6	1.969
Q2 2007	2.3	2.3	1.352	10.1	4.9	91.9	0.5	0.0	123.4	2.4	1.6	2.006
Q3 2007	2.0	2.1	1.422	8.8	7.5	90.6	-1.5	0.1	115.0	3.4	0.3	2.039
Q4 2007	1.9	4.9	1.460	10.8	6.1	89.4	3.5	2.2	111.7	1.9	4.0	1.984
Q1 2008	2.7	4.2	1.581	8.2	8.1	88.0	2.7	1.3	99.9	1.3	3.7	1.986
Q2 2008	-1.6	3.2	1.575	7.6	6.3	88.6	-4.7	1.6	106.2	-0.9	5.6	1.991
Q3 2008	-2.3	3.2	1.408	4.2	2.9	91.4	-4.1	3.6	105.9	-6.5	5.9	1.780
Q4 2008	-7.1	-1.4	1.392	0.7	-0.9	92.2	-12.5	-2.2	90.8	-8.6	0.6	1.462
Q1 2009	-10.8	-1.1	1.326	3.3	-1.6	94.4	-15.0	-3.6	99.2	-7.0	-0.1	1.430
Q2 2009	-1.1	0.0	1.402	15.4	2.3	92.3	7.1	-1.7	96.4	-1.0	2.0	1.645
Q3 2009	1.3	1.1	1.463	12.5	4.0	91.3	0.2	-1.2	89.5	0.8	3.7	1.600
Q4 2009	1.8	1.6	1.433	8.3	5.2	90.7	7.1	-1.6	93.1	1.6	3.1	1.617
Q1 2010	2.0	1.7	1.353	9.2	4.3	89.8	6.1	0.8	93.4	2.1	4.0	1.519
Q2 2010	4.1	2.0	1.229	9.3	3.4	91.0	4.4	-1.0	88.5	4.0	3.0	1.495
Q3 2010	1.3	1.7	1.360	8.7	3.9	88.4	5.8	-1.9	83.5	2.6	2.5	1.573
Q4 2010	2.1	2.6	1.327	8.4	7.8	87.4	-2.2	1.1	81.7	0.1	4.0	1.539
Q1 2011	3.7	3.6	1.418	9.2	6.5	86.4	-6.9	-0.4	82.8	2.2	6.6	1.605
Q2 2011	0.1	3.2	1.452	7.1	5.8	85.3	-2.7	-0.4	80.6	0.9	4.5	1.607
Q3 2011	0.0	1.5	1.345	6.9	5.7	87.4	10.8	0.4	77.0	2.8	4.0	1.562
Q4 2011	-1.1	3.4	1.297	6.3	3.0	87.2	0.6	-0.8	77.0	-0.1	3.3	1.554
Q1 2012	-0.4	2.6	1.333	5.8	3.0	86.3	4.1	1.8	82.4	0.3	1.9	1.599
Q2 2012	-1.0	2.4	1.267	6.0	3.9	88.0	-2.2	-0.7	79.8	-0.7	1.9	1.569
Q3 2012	-0.4	1.8	1.286	6.5	2.3	86.2	-2.7	-1.7	77.9	3.4	2.7	1.613
Q4 2012	-1.9	2.3	1.319	7.5	3.7	85.9	-0.5	-0.1	86.6	-1.3	3.9	1.626
Q1 2013	-1.3	0.8	1.282	5.4	4.1	86.2	5.1	0.0	94.2	2.1	2.5	1.519
Q2 2013	1.3	0.7	1.301	6.1	3.0	87.1	3.4	0.8	99.2	2.7	1.8	1.521
Q3 2013	0.6	1.6	1.354	7.7	3.5	86.5	1.8	3.0	98.3	3.5	2.7	1.618

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Table 3B.—*continued*

Date	Euro area real GDP growth	Euro area inflation	Euro area bilateral dollar exchange rate (USD/euro)	Developing Asia real GDP growth	Developing Asia inflation	Developing Asia bilateral dollar exchange rate (F/USD, index)	Japan real GDP growth	Japan inflation	Japan bilateral dollar exchange rate (yen/USD)	U.K. real GDP growth	U.K. inflation	U.K. bilateral dollar exchange rate (USD/pound)
Q4 2013	1.0	0.1	1.378	6.9	4.0	85.6	-0.5	1.9	105.3	2.5	1.3	1.657
Q1 2014	1.2	0.2	1.378	5.1	1.4	86.7	6.0	0.4	103.0	3.0	1.2	1.668
Q2 2014	0.3	0.4	1.369	6.9	2.8	86.4	-7.1	9.4	101.3	3.7	1.8	1.711
Q3 2014	1.0	0.6	1.263	6.5	3.1	86.9	1.0	1.6	109.7	2.9	1.6	1.622
Q4 2014	-8.8	3.8	1.112	-3.2	11.9	98.0	-9.4	0.3	101.4	-4.0	1.5	1.572
Q1 2015	-6.5	0.7	1.110	0.8	3.7	97.7	-10.6	-2.0	101.2	-4.2	-0.4	1.575
Q2 2015	-3.6	-0.7	1.103	4.1	0.1	97.5	-8.5	-3.3	101.7	-3.2	-1.3	1.571
Q3 2015	-1.5	-1.1	1.094	5.8	-1.1	97.2	-6.4	-3.3	102.6	-2.0	-1.3	1.564
Q4 2015	-0.1	-1.1	1.084	6.6	-1.2	96.7	-4.4	-2.7	103.4	-0.8	-0.9	1.558
Q1 2016	1.0	-0.3	1.088	6.8	0.4	94.7	-2.5	-1.5	103.4	0.3	0.0	1.559
Q2 2016	1.7	0.2	1.095	6.6	1.3	92.6	-1.0	-0.7	103.1	1.3	0.6	1.560
Q3 2016	2.1	0.5	1.105	6.5	1.8	90.7	0.2	-0.2	102.9	2.1	1.0	1.559
Q4 2016	2.2	0.5	1.114	6.4	1.8	89.2	1.1	-0.1	102.9	2.6	1.2	1.555
Q1 2017	2.2	0.6	1.125	6.3	1.9	88.4	1.7	0.0	103.0	3.0	1.4	1.552
Q2 2017	2.2	0.5	1.135	6.3	1.7	87.9	2.1	0.0	103.1	3.1	1.4	1.552
Q3 2017	2.0	0.5	1.143	6.4	1.7	87.5	2.3	0.1	103.1	3.2	1.4	1.552
Q4 2017	1.9	0.6	1.152	6.4	1.9	87.2	2.4	0.4	102.9	3.1	1.5	1.552

Note: Refer to Notes Regarding Scenario Variables for more information on variables.

Notes Regarding Scenario Variables

Sources for data through 2014:Q3 (as released through 10/22/2014). The 2014:Q3 values of variables marked with an asterisk (*) are projected.

***U.S. real GDP growth**: Percent change in real Gross Domestic Product at an annualized rate, Bureau of Economic Analysis.

***U.S. nominal GDP growth:** Percent change in nominal Gross Domestic Product at an annualized rate, Bureau of Economic Analysis.

***U.S. real disposable income growth:** Percent change in nominal disposable personal income divided by the price index for personal consumption expenditures at an annualized rate, Bureau of Economic Analysis.

***U.S. nominal disposable income growth:** Percent change in nominal disposable personal income at an annualized rate, Bureau of Economic Analysis.

U.S. unemployment rate: Quarterly average of monthly data, Bureau of Labor Statistics.

U.S. CPI inflation: Percent change in the Consumer Price Index at an annualized rate, Bureau of Labor Statistics.

U.S. 3-month Treasury rate: Quarterly average of 3-month Treasury bill secondary market rate on a discount basis, H.15 Release, Selected Interest Rates, Federal Reserve Board.

U.S. 5-year Treasury yield: Quarterly average of the yield on 5-year U.S. Treasury bonds, constructed for FRB/U.S. model by Federal Reserve staff based on the Svensson smoothed term structure model; see Lars E. O. Svensson (1995), "Estimating Forward Interest Rates with the Extended Nelson-Siegel Method," *Quarterly Review*, no. 3, Sveriges Riksbank, pp. 13–26.

U.S. 10-year Treasury yield: Quarterly average of the yield on 10-year U.S. Treasury bonds, constructed for FRB/U.S. model by Federal Reserve staff based on the Svensson smoothed term structure model; see id.

U.S. BBB corporate yield: Quarterly average of the yield on 10-year BBB-rated corporate bonds, constructed for FRB/U.S. model by Federal Reserve staff using a Nelson-Siegel smoothed yield curve model; see Charles R. Nelson and Andrew F. Siegel (1987), "Parsimonious Modeling of Yield Curves," *Journal of Business*, vol. 60, pp. 473–89). Data prior to 1997 is based on the WARGA database. Data after 1997 is based on the Merrill Lynch database.

U.S. mortgage rate: Quarterly average of weekly series for the interest rate of a conventional, conforming, 30-year fixed rate mortgage, obtained from the Primary Mortgage Market Survey of the Federal Home Loan Mortgage Corporation.

U.S. prime rate: Quarterly average of monthly series, H.15 Release, Selected Interest Rates, Federal Reserve Board.

U.S. Dow Jones Total Stock Market (Float Cap) Index: End of quarter value, Dow Jones.

***U.S. House Price Index:** CoreLogic, index level, seasonally adjusted by Federal Reserve staff.

***U.S. Commercial Real Estate Price Index:** From the Financial Accounts of the United States, Federal Reserve Board (Z.1 release); the series corresponds to the data for price indexes: Commercial Real Estate Price Index (series FL075035503.Q divided by 1000)

U.S. Market Volatility Index (VIX): Chicago Board Options Exchange, converted to quarterly by using the maximum close-of-day value in any quarter.

***Euro area real GDP growth:** Staff calculations based on Statistical Office of the European Communities via Haver, extended back using ECB Area Wide Model dataset (ECB Working Paper series no. 42).

Euro area inflation: Staff calculations based on Statistical Office of the European Community via Haver.

***Developing Asia real GDP growth:** Staff calculations based on Bank of Korea via Haver; Chinese National Bureau of Statistics via CEIC; Indian Central Statistical Organization via CEIC; Census and Statistics Department of Hong Kong via CEIC; and Taiwan Directorate-General of Budget, Accounting, and Statistics via CEIC.

***Developing Asia inflation:** Staff calculations based on Chinese National Bureau of Statistics via CEIC; Indian Ministry of Statistics and Programme Implementation via Haver; Labour Bureau of India via CEIC; National Statistical Office of Korea via CEIC; Census and Statistic Department of Hong Kong via CEIC; and Taiwan Directorate-General of Budget, Accounting, and Statistics via CEIC.

***Japan real GDP growth:** Cabinet Office via Haver.

Japan inflation: Ministry of Internal Affairs and Communications via Haver.

U.K. real GDP growth: Office for National Statistics via Haver.

U.K. inflation: Staff calculations based on Office for National Statistics (uses Retail Price Index to extend series back to 1960) via Haver.

***Exchange rates:** Bloomberg.

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